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Soil
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Idaho

Basin Outlook Report

May 1, 1994



Basin Outlook Reports and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:
Your local Soil Conservation Service Office

or

Soil Conservation Service
Snow Surveys
3244 Elder Street, Room 124
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(208) 334-1614

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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IDAHO MOUNTAIN SNOWPACK

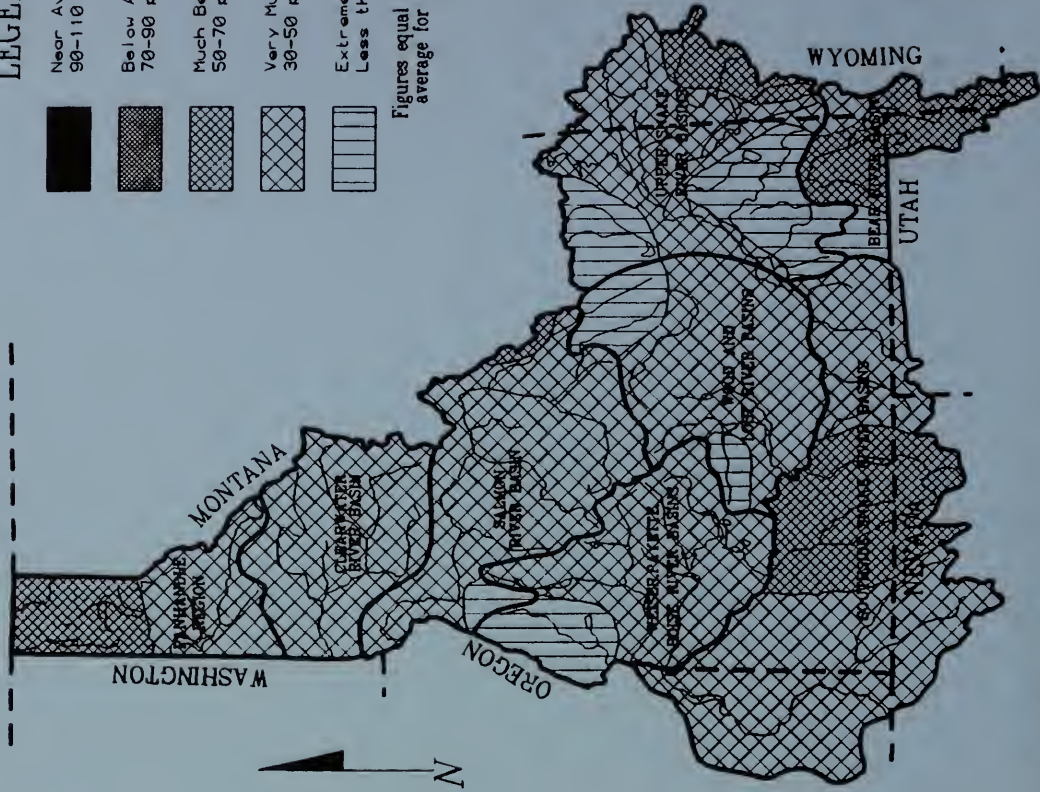
MAY 1, 1994

0 25 50 75 100 MI

LEGEND



Figures equal percent of average for drainage.



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE



IDAHO WATER SUPPLY OUTLOOK REPORT

MAY 1, 1994

SUMMARY

Water users in many parts of Idaho can expect water shortages this summer. Unseasonably warm temperatures during April caused further declines in Idaho's meager mountain snowpack, and most areas now report snowpacks less than half of average. Spring and summer streamflow forecasts call for very low flows throughout the state, with near record minimum volumes forecast in the St. Joe, Spokane, Clearwater, Big Wood, and Big Lost drainages. Early season irrigation demands are already tapping into many reservoirs in southern Idaho, depleting that supply. Looking even farther ahead, the 1995 water supply may be entirely dependent upon next year's snowpack as many reservoirs will be nearly empty by the end of this season.

SNOWPACK

Warm temperatures during April caused significant snowmelt in most basins. Snowpacks currently range from only 30-40% of average in central Idaho to 40-50% in the northern, southern, and eastern portions of the state. In the Panhandle and Clearwater basins, the May 1 snowpack is the second and third lowest since 1961, respectively. The overall low snowpack figures indicate an early shift in the timing of snowmelt and runoff: streamflows will be low later in the summer when they are needed most.

PRECIPITATION

April precipitation was below normal in the north, near average in the central mountains, and well above average along the southern edge of the state. The Panhandle received about three-fourths of normal mountain precipitation; conversely, southside basins received about 170% of average. Overall, the April showers were a case of too little too late: the early snowmelt more than offset any gains from precipitation. Precipitation for the water year ranges from 60-70% of average for the entire state except the Bear River area which reports 77% of average. Soil moisture conditions are very dry statewide. Dryland farming, range conditions, forest health, and other concerns dependent upon natural precipitation will be impacted by the dry conditions this year.

RESERVOIRS

Idaho's reservoir storage will help but not eliminate water shortages in an otherwise drastically low runoff year. With most streams expected to yield only about half of normal flows, last year's carryover will be an important source of irrigation supplies. Storage in the Payette basin will meet expected irrigation demands while irrigators in the upper Snake may have just enough water this year. The Boise basin reports near average storage, but that will not be adequate to meet a full irrigation supply. Unseasonably warm temperatures have caused an early onset of irrigation demands, and most reservoirs will begin dropping very soon. With very little natural flow expected this year, reservoirs across the state will be nearly empty at the end of the 1994 irrigation season. Irrigators are encouraged to be water-wise this year in the hopes of retaining some carryover storage for 1995. Note: SCS reports reservoir information in terms of usable volumes, which includes both active, inactive, and in some cases dead storage. Other operators may report reservoir contents in different terms. For additional information, see the reservoir definitions in the back of this report.

STREAMFLOW

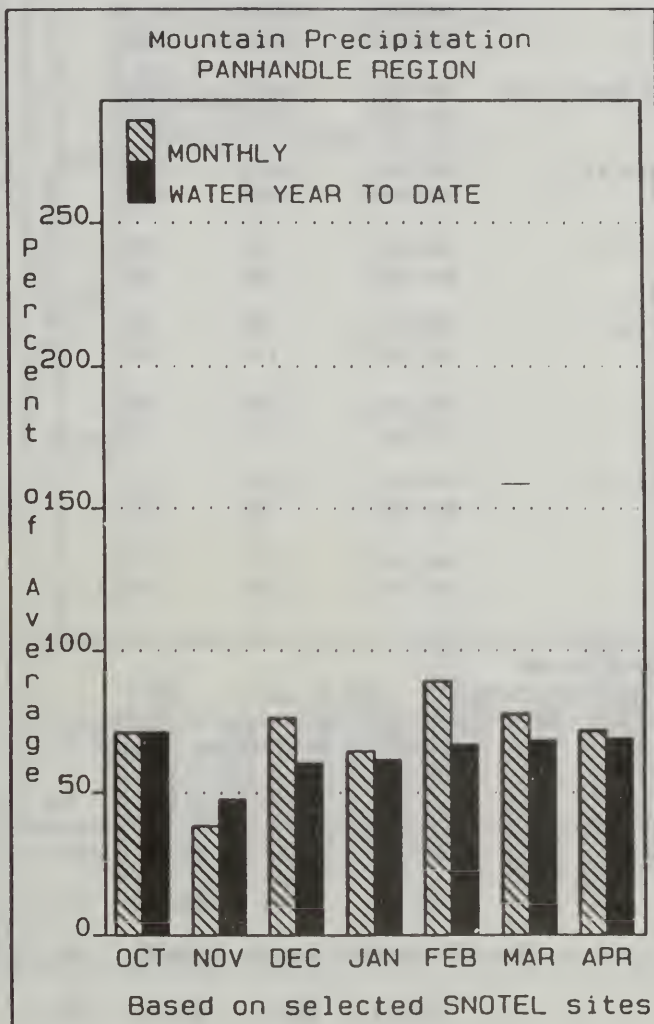
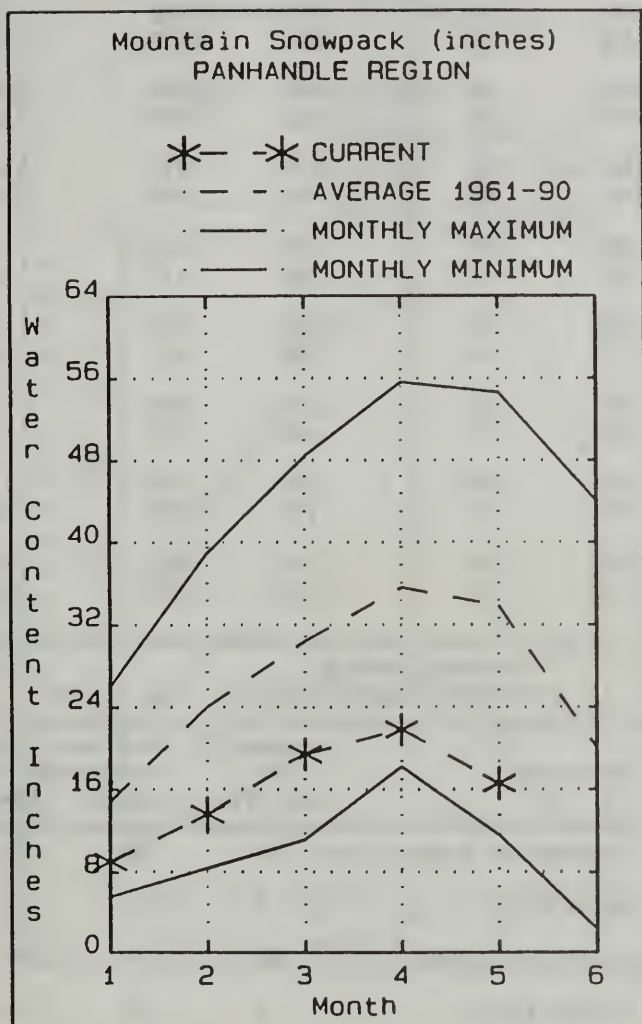
Hot weather in mid-April caused a rise in stream levels throughout most of Idaho. Some streams may have already reached their seasonal peak during this period, four to six weeks earlier than normal. Despite the increased flows, April runoff was still below average in central and southern Idaho. Northern Idaho and the upper Snake streams had normal to slightly above normal April runoff. Streamflow forecasts for the May through September period reflect the extremely low snowpack figures and range from less than 30% of average in the Wood and Lost River basins to around 60% of average in the upper Snake basin. Forecasts for the Big Wood and Clearwater basins call for record low volumes this summer. Stored reservoir water will augment summer flows in a number of basins, but natural streams could drop to low flow conditions as much as four to six weeks earlier than normal this year.

RECREATION OUTLOOK

Idaho recreational water users can expect low flows for many rivers this summer and an early drawdown of many reservoirs. Many streams recorded their peak flows during April -- four to six weeks earlier than normal. Northern Idaho streams will have an early runoff season, with lower than normal flows expected. Flows should be adequate for river running in the Salmon basin, but Middle Fork users should plan to use downstream launch points in July. River runners in the Payette and Snake basins can expect an excellent season due to the abundant reservoir storage in those areas. Southwest Idaho rivers are another story: the Jarbidge and Bruneau will have very low flows this year, and the Owyhee had its peak in early March. Reservoir users across the state should expect earlier than normal drawdowns as this important resource is used to meet summer irrigation demands.

PANHANDLE REGION

MAY 1, 1994



WATER SUPPLY OUTLOOK

April precipitation in the Panhandle Region was 72% of average, bringing the water year total to only 69% of average -- the lowest in at least 8 years. Similarly, the May 1 snowpack is the second lowest since 1961, with only 1977 reporting less snow. Snowpacks currently range from 40% of average in the Spokane River basin to 65% of average in the Kootenai basin in Canada. Streamflow forecasts call for about half of normal runoff with the St. Joe and Spokane rivers forecasts just above the record low volumes of 1992. Coeur D'Alene Lake is three-fourths full while Priest Lake is nearly full. The combined storage of the six major reservoirs in the Panhandle and Clark Fork basin in Montana is only 50% of capacity. Currently, the deep soil profile is very dry. The lack of precipitation will adversely affect dryland farming, forest health, and range conditions.

PANHANDLE REGION
Streamflow Forecasts - May 1, 1994

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
KOOTENAI at Leonia (1,2)	MAY-JUL	3330	4120	4480	72	4840	5630	6223
	MAY-SEP	3960	4890	5310	73	5730	6660	7304
CLARK FK at Whitehorse Rpds (1,2)	MAY-JUL	4010	5250	5820	58	6390	7630	10020
	MAY-SEP	4570	5960	6590	59	7220	8610	11200
PEND OREILLE Lake Inflow (1,2)	MAY-JUL	4010	5350	5960	54	6570	7910	11070
	MAY-SEP	4550	6040	6720	55	7400	8890	12290
PRIEST nr Priest River (1,2)	MAY-JUL	167	275	326	52	375	485	627
	MAY-SEP	196	305	355	52	405	515	680
COEUR D'ALENE at Enaville	MAY-JUL	94	163	210	44	255	325	472
	MAY-SEP	116	187	235	46	285	355	512
ST.JOE at Calder	MAY-JUL	240	320	375	43	430	510	881
	MAY-SEP	290	375	430	45	485	570	949
SPOKANE near Post Falls (2)	MAY-JUL	310	525	675	39	825	1040	1749
	MAY-SEP	390	610	760	41	910	1130	1846
SPOKANE at Long Lake	MAY-JUL	515	740	895	45	1050	1280	1975
	MAY-SEP	680	910	1070	49	1230	1460	2198

PANHANDLE REGION
Reservoir Storage (1000 AF) - End of April

PANHANDLE REGION
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HUNGRY HORSE	3451.0	1210.0	900.0	2043.0	Kootenai ab Bonners Ferry	16	78	55
FLATHEAD LAKE	1791.0	1000.0	787.0	937.2	Moyie River	1	81	49
NOXON RAPIDS	335.0	318.8	263.5	208.7	Clark Fork River	58	59	48
PEND OREILLE	1561.3	825.2	806.5	920.7	Priest River	4	73	54
COEUR D'ALENE	238.5	184.5	240.5	246.7	Pend Oreille River	85	67	54
PRIEST LAKE	119.3	116.0	82.0	96.2	Rathdrum Creek	0	0	0
					Hayden Lake	0	0	0
					Coeur d'Alene River	7	52	40
					St. Joe River	2	55	44
					Spokane River	9	53	41
					Palouse River	1	0	0

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

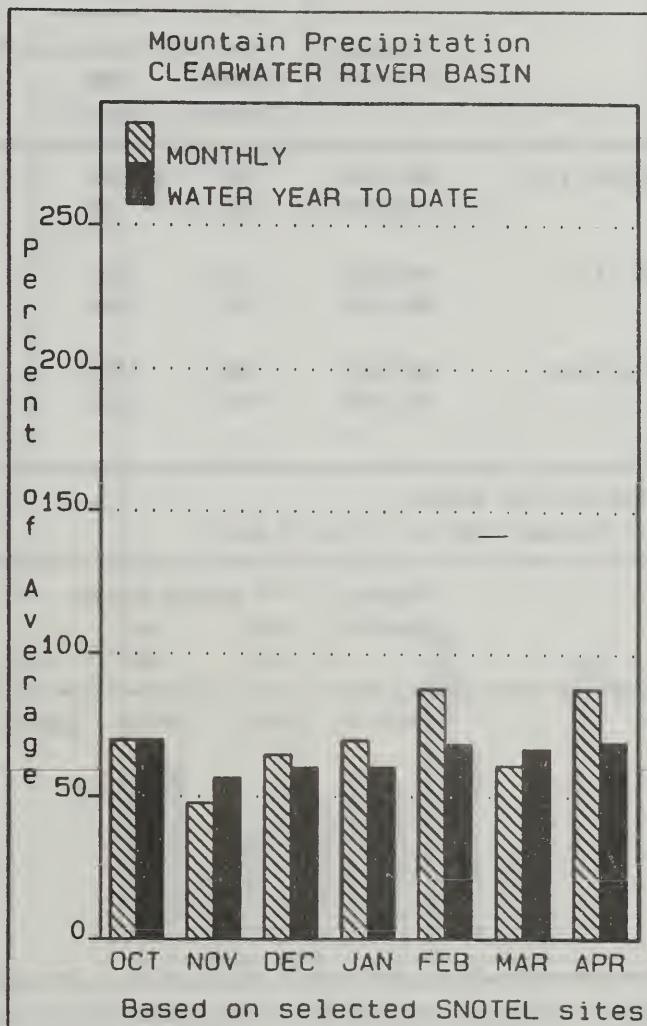
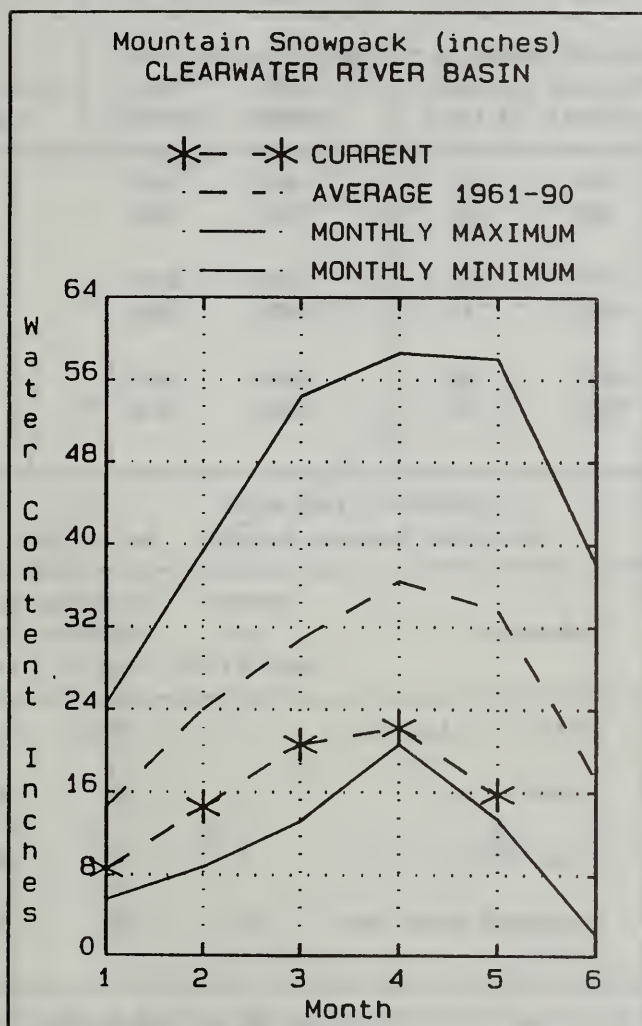
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

CLEARWATER RIVER BASIN

MAY 1, 1994



WATER SUPPLY OUTLOOK

Precipitation in the Clearwater basin was 88% of average in April. Water year to date precipitation is only 69% of average -- 15 percentage points less than last year at this time. The snowpack is currently half of normal and is the third lowest since 1961: only 1977 and 1987 had lower values. Streamflow forecasts call for 35-40% of average which are slightly less than the record minimum volumes of 1977. Streams in the Clearwater basin recorded snowmelt peak flows in late April, with the potential for another peak in early May. Summer baseflows are expected to return early and be lower than normal. Dryland farming and forest health will feel the impacts of these dry conditions.

CLEARWATER RIVER BASIN
Streamflow Forecasts - May 1, 1994

Forecast Point	Forecast Period	<===== Drier ===== Future Conditions ===== Wetter =====>						
		Chance Of Exceeding *						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
DWORSHAK Reservoir Inflow (2)	MAY-JUL	365	575	720	35	865	1070	2029
	MAY-SEP	520	735	880	40	1030	1240	2202
CLEARWATER at Orofino (1)	MAY-JUL	750	1400	1690	44	1980	2630	3831
	MAY-SEP	670	1360	1676	41	1990	2680	4089
CLEARWATER at Spalding (1,2)	MAY-JUL	980	1860	2260	38	2660	3540	5972
	MAY-SEP	1060	2000	2433	38	2860	3810	6405

CLEARWATER RIVER BASIN
Reservoir Storage (1000 AF) - End of April

CLEARWATER RIVER BASIN
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DWORSHAK	3459.0	3110.7	3151.8	2276.0	North Fork Clearwater	11	59	47
					Lochsa River	4	63	47
					Selway River	5	62	50
					Clearwater Basin Total	18	60	47

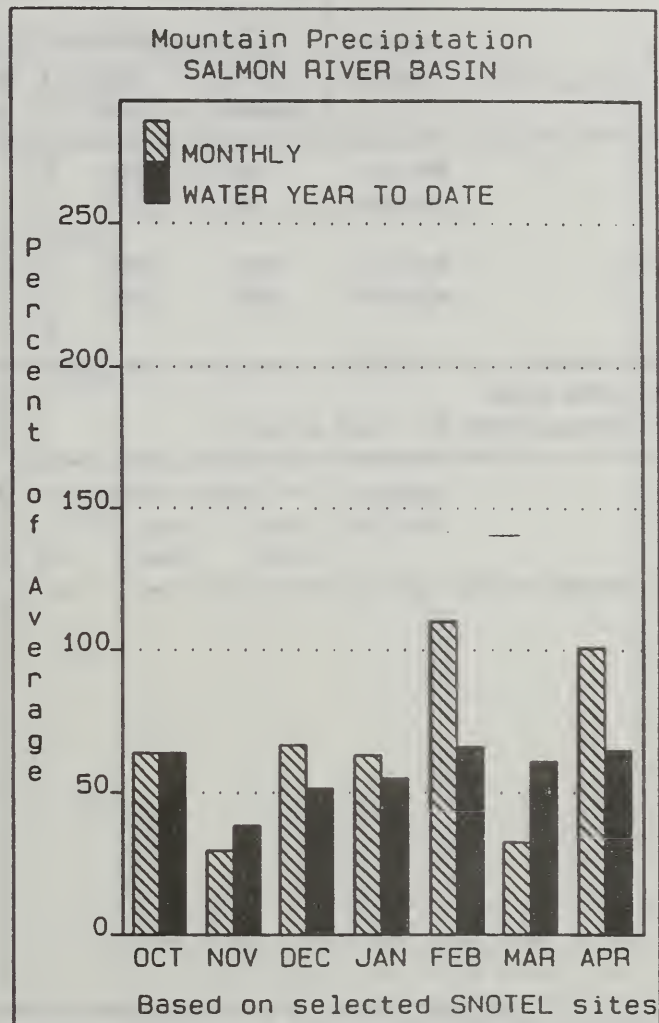
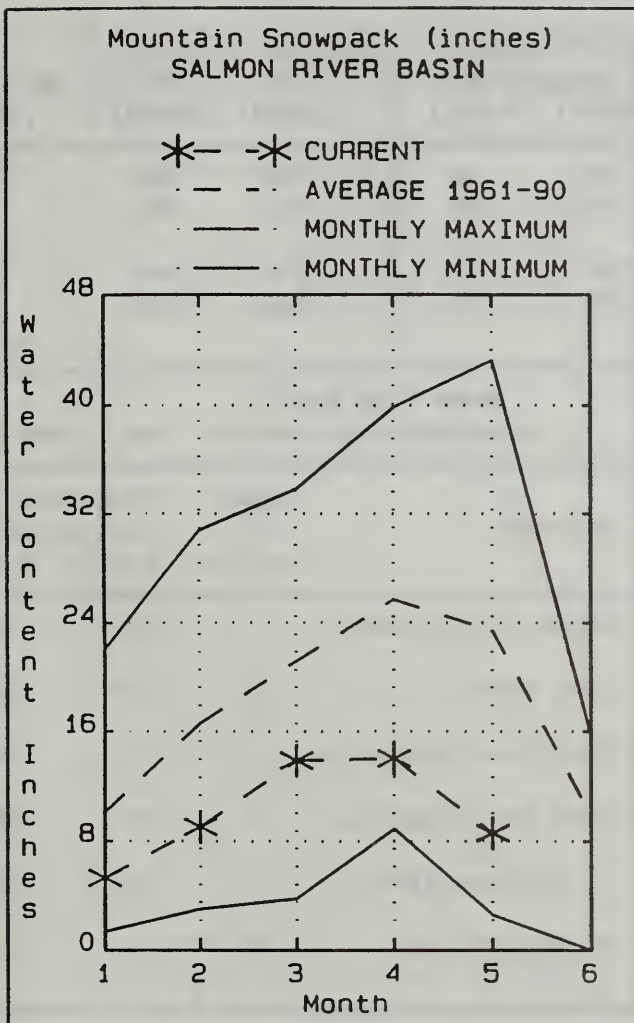
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
 (2) - The value is natural flow - actual flow may be affected by upstream water management.

SALMON RIVER BASIN

MAY 1, 1994



WATER SUPPLY OUTLOOK

Despite near average mountain precipitation during April, snowpacks declined drastically as the weather warmed midway into the month. As of May 1, the snowpack was only 40% of average. An early snowmelt peak flow on the Salmon River at Whitebird occurred on April 23 (23,385 cfs) due to unusually hot weather. Warmer temperatures returning in early May might yield another streamflow peak. Forecasts for the remaining May-July period dropped from last month and now call for just 45% of average Salmon River at Whitebird. Flows should be adequate for recreational users in most cases, but irrigators and other water users will see a much earlier than normal return to low flow conditions. Soil moisture conditions are very dry, and will adversely impact dryland farming, range, and forest health.

SALMON RIVER BASIN
Streamflow Forecasts - May 1, 1994

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
SALMON at Salmon (1)	MAY-JUL	82	280	370	48	460	660	772
	MAY-SEP	76	310	420	46	530	765	922
SALMON at White Bird (1)	MAY-JUL	1230	2010	2360	45	2710	3490	5284
	MAY-SEP	1410	2280	2670	45	3060	3930	5930

SALMON RIVER BASIN
Reservoir Storage (1000 AF) - End of April

SALMON RIVER BASIN
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Salmon River ab Salmon	8	29	34
					Lemhi River	5	57	60
					Middle Fork Salmon River	3	31	34
					South Fork Salmon River	3	35	38
					Little Salmon River	4	20	24
					Salmon Basin Total	24	36	40

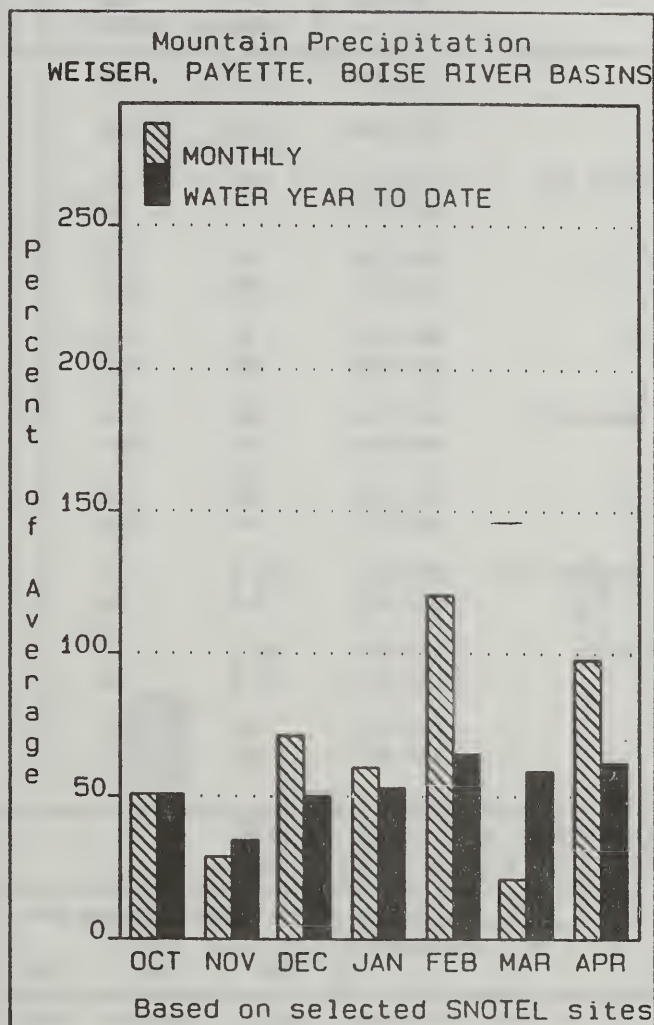
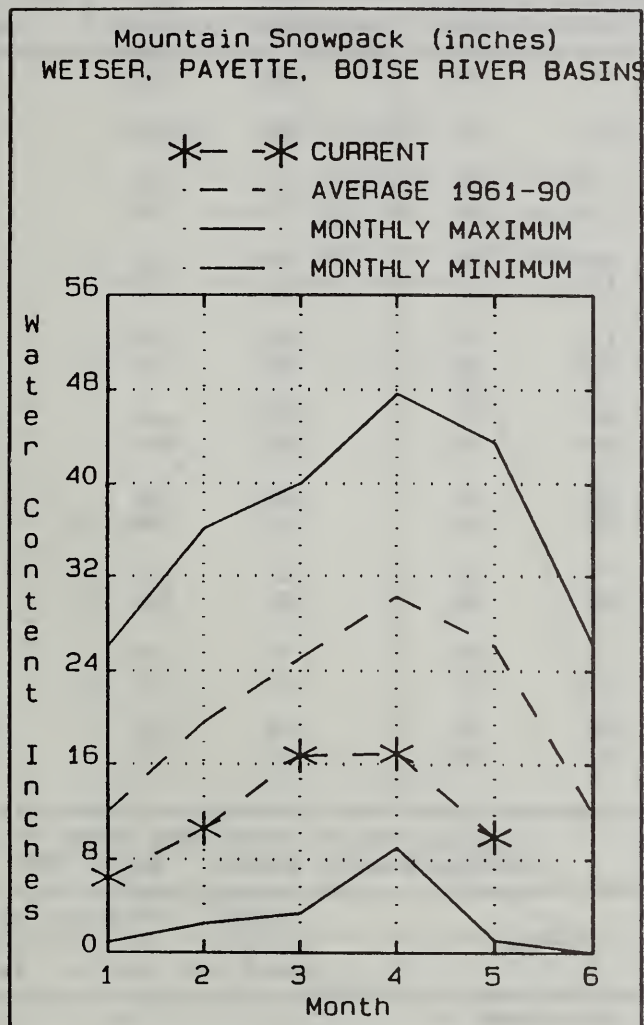
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WEISER, PAYETTE, BOISE RIVER BASINS

MAY 1, 1994



WATER SUPPLY OUTLOOK

April provided normal precipitation to the west central mountains, however, snowpacks have declined significantly during the month due to unseasonably warm temperatures. Currently, snowpacks range from only 11% of average in the Weiser basin to 48% in the SF Boise. Streamflow forecasts reflect these low figures and call for less than 50% of average for the remaining spring and summer months. Reservoir storage in the Payette basin is above average; the Boise basin reports near average conditions. Neither system is expected to fill to capacity, and irrigation shortages are expected in the Boise basin. Inflows have just kept pace with drafting on the Boise system; with peak flows behind us the reservoirs will begin to drop quickly. Irrigators should practice conservation measures this year to provide some carryover for next year. For more specific information, water users are encouraged to keep in touch with their local irrigation districts.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - May 1, 1994

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						
		=====		Chance Of Exceeding *		=====		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
WEISER nr Weiser (1)	MAY-JUL	13.0	69	112	45	156	250	250
SF PAYETTE at Lowman	MAY-SEP	170	197	215	50	235	260	431
DEADWOOD RESERVOIR Inflow (2)	MAY-JUL	31	41	48	40	55	65	120
	MAY-SEP	34	45	52	41	59	70	127
NF PAYETTE nr Cascade (2)	MAY-JUL	92	136	166	41	196	240	407
	MAY-SEP	108	155	187	42	220	265	442
NF PAYETTE nr Banks (2)	MAY-JUL	87	149	191	37	235	295	512
	MAY-SEP	107	174	220	40	265	335	554
PAYETTE nr Horseshoe Bend (2)	MAY-JUL	265	380	455	35	530	645	1304
	MAY-SEP	405	525	610	42	695	815	1442
BOISE near Twin Springs	MAY-JUL	169	205	230	45	255	290	509
	MAY-SEP	189	230	255	45	280	320	564
SF BOISE at Anderson Rnch Dm (1,2)	MAY-JUL	16.0	80	112	26	144	215	432
	MAY-SEP	9.0	86	121	26	156	235	470
MORES CK nr Arrowrock Dam	MAY-JUL	14.0	21	26	34	31	38	77
	MAY-SEP	17.0	24	29	35	34	41	82
BOISE nr Boise (1,2)	MAY-JUL	146	285	345	32	405	545	1090
	MAY-SEP	230	380	445	37	510	660	1204

WEISER, PAYETTE, BOISE RIVER BASINS
Reservoir Storage (1000 AF) - End of April

WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MANN CREEK	11.1	10.9	11.7	10.4	Mann Creek	1	9	13
CASCADE	703.2	524.3	448.2	411.7	Weiser River	3	8	11
DEADWOOD	161.9	114.6	75.2	101.1	North Fork Payette	7	27	32
ANDERSON RANCH	464.2	338.0	131.5	327.2	South Fork Payette	4	35	38
ARROWROCK	286.6	139.2	257.6	214.9	Payette Basin Total	12	31	35
LUCKY PEAK	293.2	202.6	246.4	182.9	Middle & North Fork Boise	6	38	45
LAKE LOWELL (DEER FLAT)	177.1	126.9	118.8	169.8	South Fork Boise River	5	40	48
					Mores Creek	4	35	41
					Boise Basin Total	11	38	45
					Canyon Creek	0	0	0

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

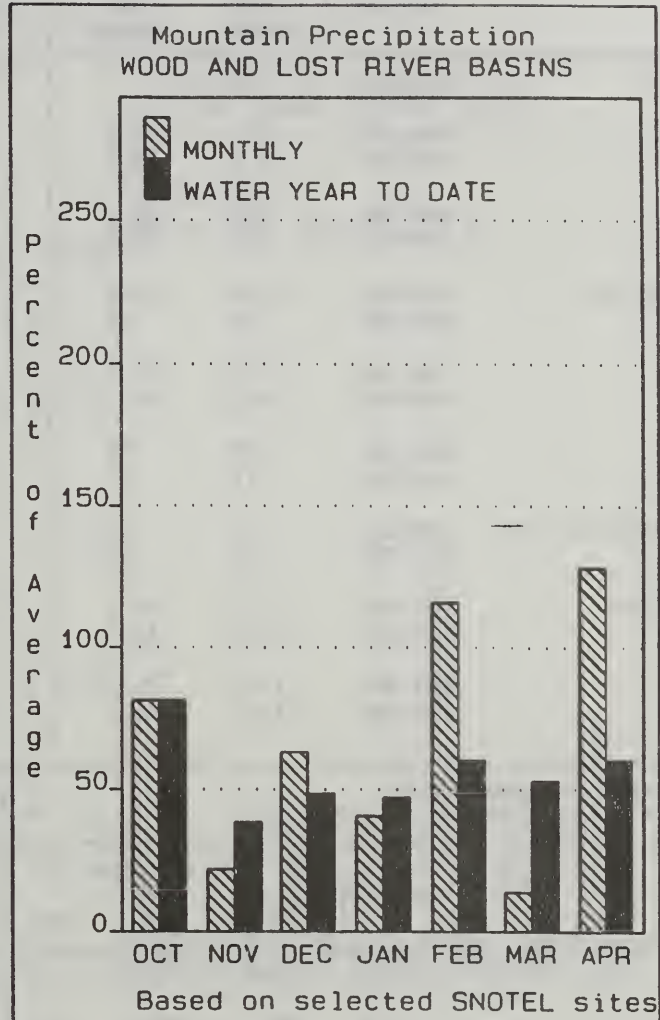
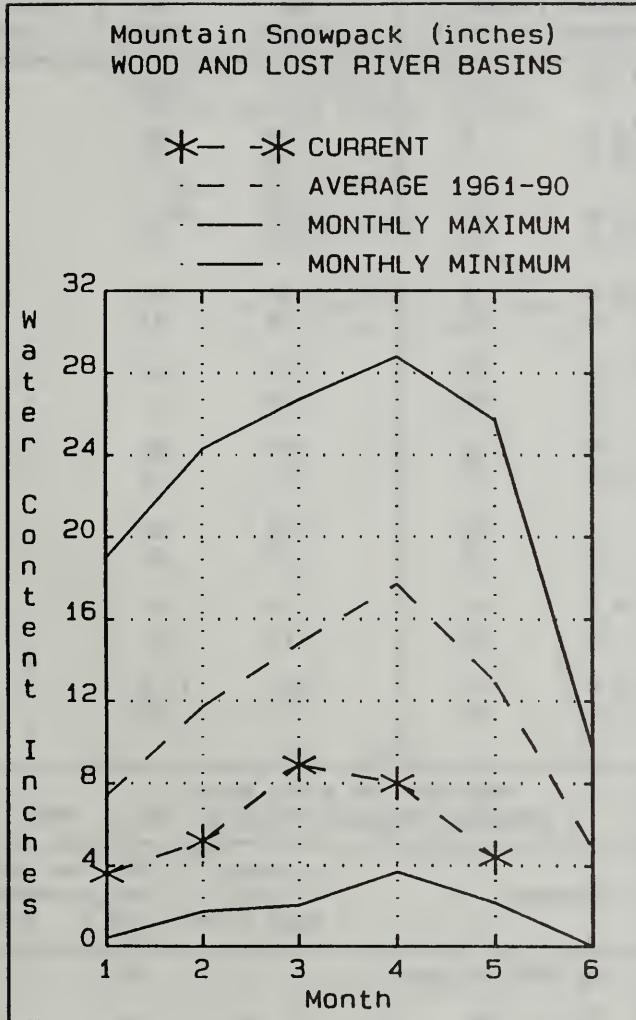
The average is computed for the 1961-1990 base period.

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(2) - The value is natural flow - actual flow may be affected by upstream water management.

WOOD and LOST RIVER BASINS

MAY 1, 1994



WATER SUPPLY OUTLOOK

Precipitation during April was 128% above average, but the unseasonably warm temperatures caused snowmelt which more than offset any moisture gains. Snowpacks are about the same as 1992: less than 40% of average throughout the basin. Streamflows are forecast at record low volumes for the Big Wood River, about 9% of average. Forecasts for the Little Wood and Mackay Reservoir inflows are about 33% of average, with the Little Lost River expected to yield 60% of average due to the large groundwater contribution in that basin. Magic Reservoir is about half full, Little Wood is near full and Mackay reports 87% of capacity. These storages will help offset the drastically low runoff, but agricultural water shortages are still expected. Water users should plan for another short year, and should keep in touch with their local irrigation districts for more specific information.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - May 1, 1994

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
BIG WOOD at Hailey (1)	MAY-SEP	8.0		72	28		158	255
BIG WOOD nr Bellevue	MAY-JUL	12.0	13.0	13.0	8	29	53	156
	MAY-SEP	16.0	18.0	18.0	11	35	61	170
CAMAS CK nr Blaine	MAY-JUL	0.0	2.0	6.0	14	11.0	19.0	42
	MAY-SEP	0.0	2.0	7.0	16	13.0	21	43
BIG WOOD blw Magic Dam (2)	MAY-JUL	16.0	18.0	18.0	9	37	65	202
	MAY-SEP	21	23	23	11	43	73	216
LITTLE WOOD nr Carey	MAY-JUL	17.0	18.0	20	31	26	34	65
	MAY-SEP	15.0	16.0	22	30	28	37	73
BIG LOST at Howell	MAY-JUL	59	79	93	55	107	128	169
	MAY-SEP	71	93	109	56	125	148	195
BIG LOST blw Mackay Reservoir (2)	MAY-JUL	21	35	45	33	55	69	137
	MAY-SEP	34	49	59	35	69	84	169
LITTLE LOST blw Wet Creek	MAY-JUL	11.0	15.0	18.0	65	20	24	27
	MAY-SEP	13.0	18.0	22	63	26	31	35
LITTLE LOST nr Howe	MAY-JUL	11.0	13.0	15.0	54	16.0	18.0	27
	MAY-SEP	16.0	19.0	21	55	23	27	38

WOOD AND LOST RIVER BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage ***		
		This Year	Last Year	Avg
MAGIC	191.5	99.9	147.2	167.7
LITTLE WOOD	30.0	29.5	26.4	24.6
MACKAY	44.4	38.5	29.1	34.2

WOOD AND LOST RIVER BASINS
Watershed Snowpack Analysis - May 1, 1994

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
Big Wood ab Magic	7	30	37
Camas Creek	1	0	0
Big Wood Basin Total	8	30	37
Little Wood River	3	29	38
Fish Creek	0	0	0
Big Lost River	6	26	32
Little Lost River	3	20	26

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

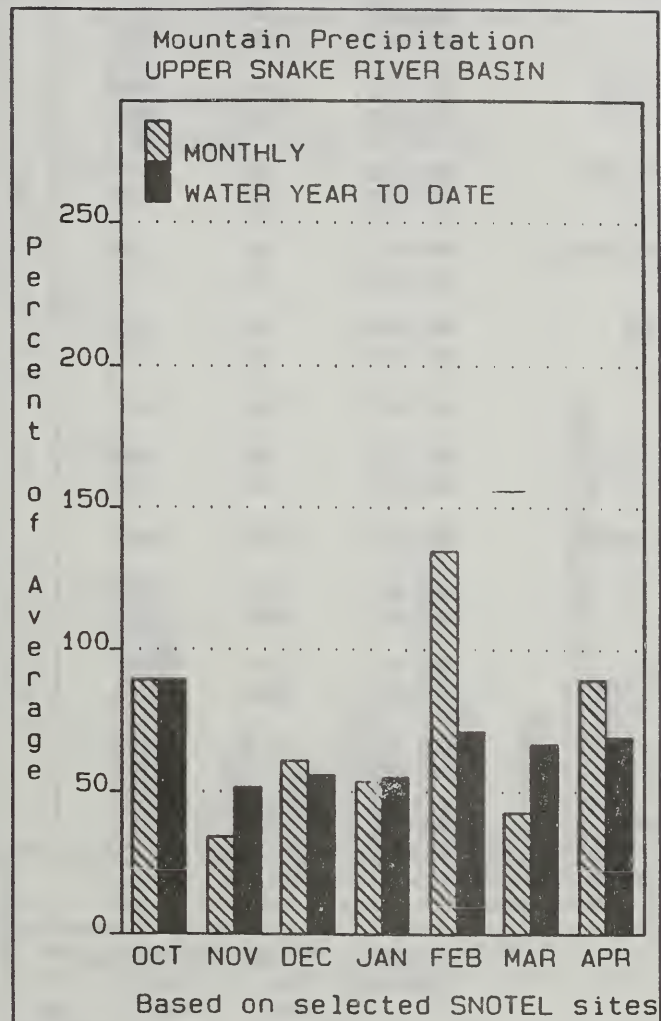
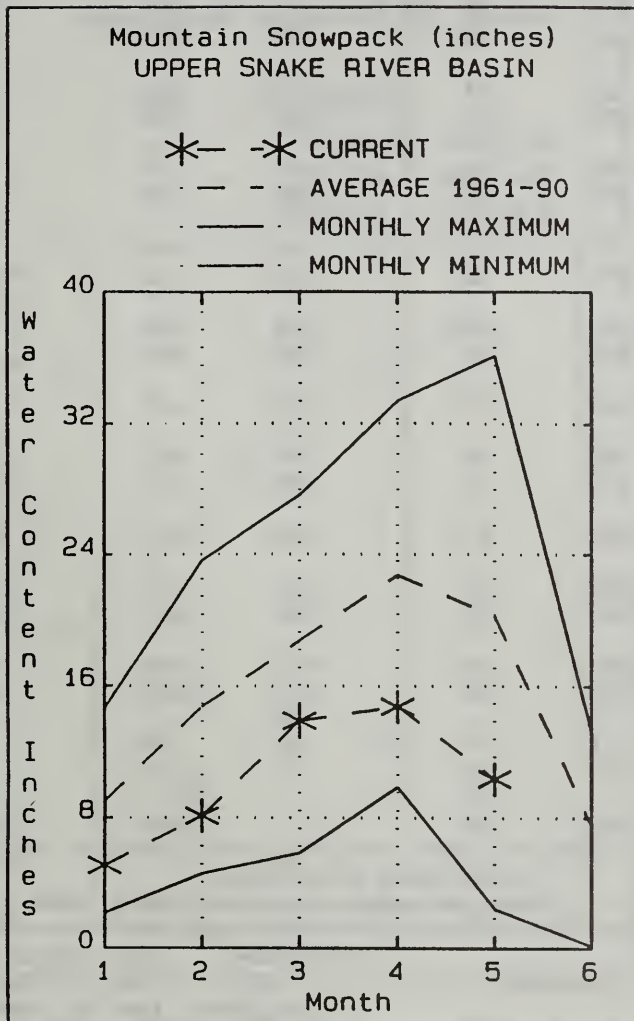
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

UPPER SNAKE RIVER BASIN

MAY 1, 1994



WATER SUPPLY OUTLOOK

April precipitation in the upper Snake basin was 89% of average, and the unseasonably warm temperatures have caused snowpacks to drop dramatically over the last month. Currently, snowpacks range from only 40 to 60% of average in the basin. Streamflow forecasts reflect these low numbers and call for only 50-70% of average. The good news continues to be reservoirs: the upper Snake system is almost full and should buffer most potential water shortages. Irrigators should, however, practice water conservation measures in an effort to keep some carryover for next year.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - May 1, 1994

Forecast Point WE	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
HENRYS FORK nr Ashton (2)	MAY-JUL	245	285	315	73	345	385	432
	MAY-SEP	335	390	430	70	470	525	618
HENRYS FORK nr Rexburg (2)	MAY-JUL	495	570	620	61	670	750	1016
	MAY-SEP	640	735	800	60	865	960	1339
FALLS RIVER nr Squirrel (2)	MAY-JUL	129	149	163	51	177	197	322
	MAY-SEP	145	170	186	48	205	225	390
TETON abv S Leigh Ck nr Driggs	MAY-JUL	52	68	79	61	90	106	130
	MAY-SEP	77	97	110	62	123	143	177
TETON nr St. Anthony (2)	MAY-JUL	84	122	148	45	174	210	329
	MAY-SEP	130	175	205	50	235	280	408
SNAKE nr Moran (1,2)	MAY-SEP	360	440	480	59	520	600	814
SALT abv Reservoir nr Etna	MAY-JUL	89	135	167	64	199	245	261
	MAY-SEP	128	180	215	63	250	300	341
PALISADES Rsvr Inflow (adj)	MAY-SEP	1430	1660	1820	53	1980	2210	3426
SNAKE nr Heise (2)	MAY-JUL	1440	1670	1830	60	1990	2220	3073
	MAY-SEP	1560	1830	2010	55	2190	2460	3670
SNAKE nr Blackfoot (2)	MAY-JUL	1510	1950	2250	58	2550	2990	3855
	MAY-SEP	1900	2370	2700	56	3030	3500	4806
PORTNEUF at Topaz	MAY-JUL	15.0	22	27	49	32	39	55
	MAY-SEP	21	31	37	49	43	53	76
AMERICAN FALLS RESV Inflow (1,2)	MAY-JUL	1630		635	26		3570	2463

UPPER SNAKE RIVER BASIN
Reservoir Storage (1000 AF) - End of April

UPPER SNAKE RIVER BASIN
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HENRYS LAKE	90.4	89.3	66.6	81.8	Camas-Beaver Creeks	2	6	10
ISLAND PARK	135.2	134.2	103.7	125.7	Henrys Fork River	10	45	49
GRASSY LAKE	15.2	13.9	13.7	11.7	Teton River	8	42	51
JACKSON LAKE	847.0	670.0	202.7	456.5	Snake above Jackson Lake	8	41	42
PALISADES	1400.0	1397.2	697.5	950.0	Gros Ventre River	3	50	52
RIRIE	80.5	59.2	38.5	59.4	Hoback River	6	48	53
BLACKFOOT	348.7	225.1	83.5	274.6	Greys River	5	57	62
AMERICAN FALLS	1672.6	1639.6	1613.2	1542.9	Salt River	5	40	46
					Snake above Palisades	27	45	49
					Willow Creek	4	18	23
					Blackfoot River	2	10	10
					Portneuf River	2	17	29
					Snake abv American Falls	34	41	46

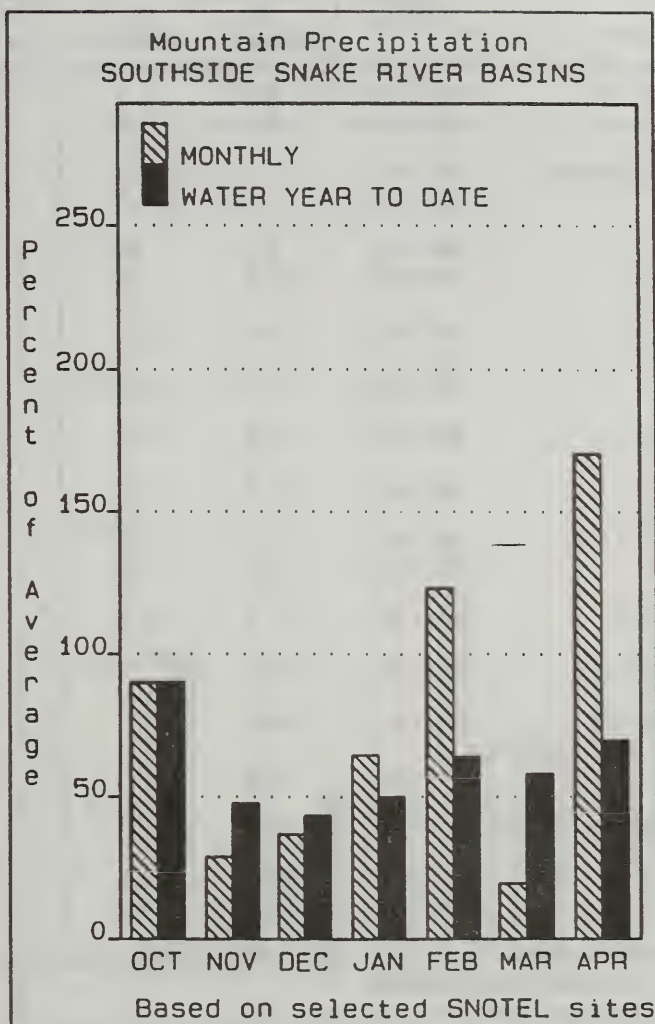
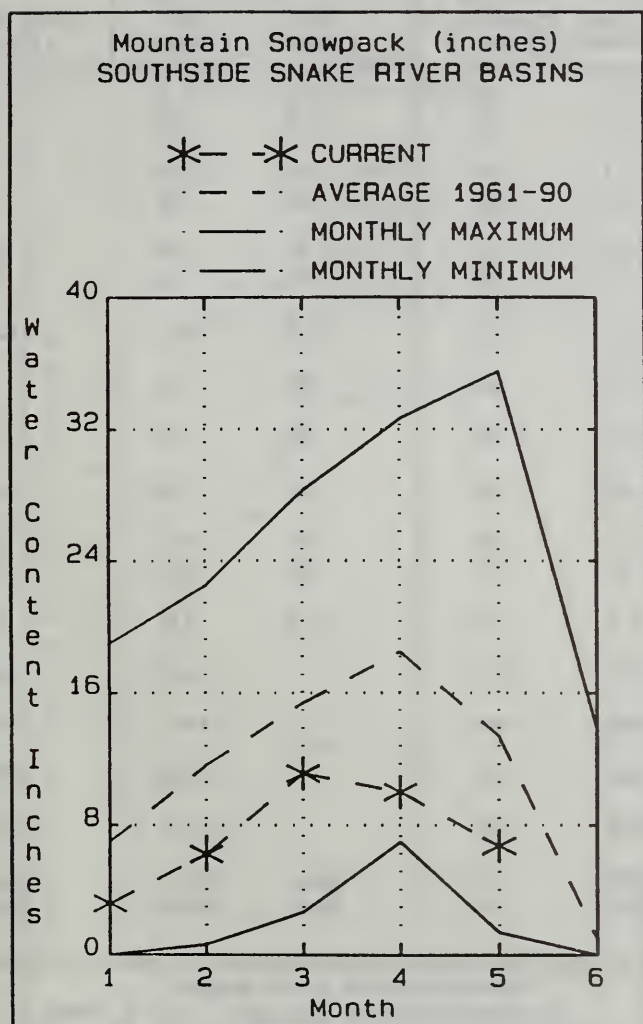
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table. The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

SOUTHSIDE SNAKE RIVER BASINS

MAY 1, 1994



WATER SUPPLY OUTLOOK

The southern edge of the state was blessed with above average precipitation during April: mountain SNOTEL sites reported a whopping 170% of average. Unfortunately, it's a case of too little too late as snowpacks continue to decline in response to the unseasonably warm weather. Currently, snowpacks are only about half of normal in the area. Streamflow forecasts continue to look bleak and call for only 30-40% of normal runoff. Reservoirs are also well below normal, resulting in grim prospects for this year's water supply. Agricultural water shortages are expected in most areas; water users should keep in touch with their local irrigation districts for more specific information.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - May 1, 1994

		<<===== Drier ===== Future Conditions ===== Wetter =====>>						
Forecast Point	Forecast Period	=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
OAKLEY RESERVOIR Inflow (2)	MAY-JUL	0.0	2.0	6.0	30	11.0	17.0	21
	MAY-SEP	0.0	4.0	9.0	35	13.0	20	24
SALMON FALLS CK nr San Jacinto	MAY-JUL	3.0	8.0	21	37	34	53	57
	MAY-SEP	1.0	9.0	22	35	36	56	62
BRUNEAU nr Hot Spring	MAY-JUL	3.0	31	50	31	69	97	162
	MAY-SEP	11.0	42	62	36	83	113	173
OWYHEE nr Gold Ck (2)	MAY-JUL	0.0	0.1	3.1	25	6.8	12.2	12.5
OWYHEE nr Owyhee (2)	MAY-JUL	1.0	14.0	24	41	35	50	58
SF OWYHEE nr Whiterock	MAY-JUL	4.0	7.0	21	40	35	55	52
OWYHEE nr Rome	MAY-JUL	2.0	20	40	20	80	140	200
OWYHEE RESERVOIR Inflow (1,2)	MAY-JUL	2.0	14.0	55	26	96	186	210
	MAY-SEP	2.0	22	64	27	107	200	238
SUCCOR CK nr Jordan Valley	MAY-JUL	0.1	0.2	2.0	39	3.8	6.4	5.1
SNAKE RIVER at King Hill (2)	MAY-JUL	610		1240	61		1830	2038
SNAKE RIVER near Murphy (2)	MAY-JUL	625		1300	63		1910	2077
SNAKE RIVER at Weiser (2)	MAY-JUL	415		1480	39		2580	3793
SNAKE RIVER at Hells Canyon Dam (2)	MAY-JUL	515		1640	38		2910	4276
SNAKE blw Lower Granite Dam (1,2)	MAY-JUL	3880	6140	7170	42	8200	10500	16940
	MAY-SEP	4450	7060	8253	42	9440	12100	19650

SOUTHSIDE SNAKE RIVER BASINS
Reservoir Storage (1000 AF) - End of April

SOUTHSIDE SNAKE RIVER BASINS
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
OAKLEY	77.4	18.8	22.5	39.2	Raft River	1	27	49
SALMON FALLS	182.6	55.6	57.3	81.4	Goose-Trapper Creeks	3	20	29
WILDHORSE RESERVOIR	71.5	37.4	36.0	47.2	Salmon Falls Creek	5	47	58
OWYHEE	715.0	449.8	715.9	619.0	Bruneau River	5	43	54
BROWNLEE	1419.3	1379.0	1400.2	959.9	Owyhee Basin Total	7	29	40

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

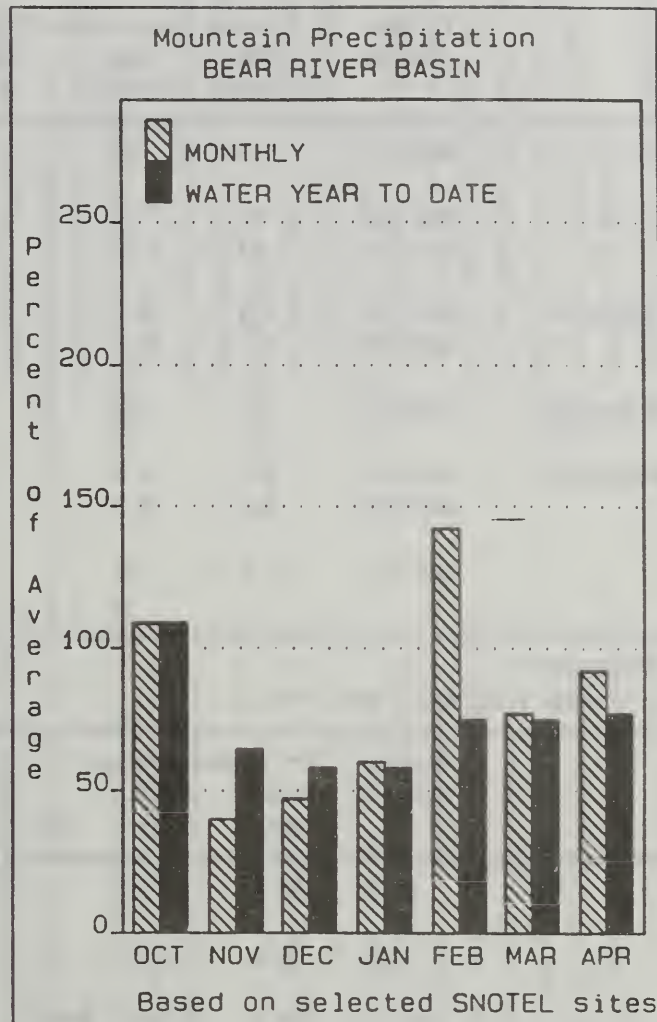
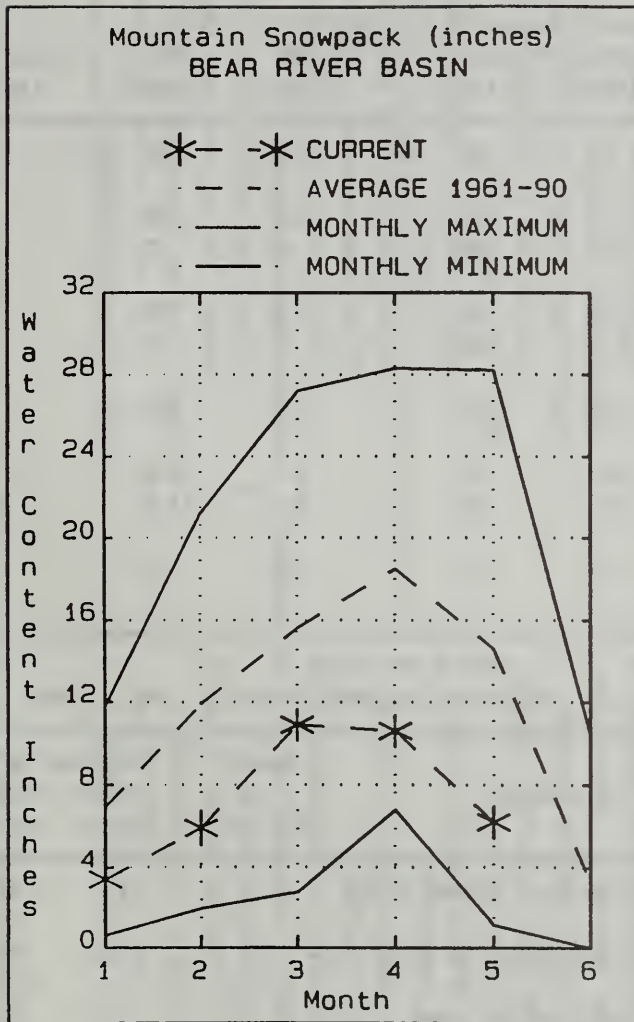
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

BEAR RIVER BASIN

MAY 1, 1994



WATER SUPPLY OUTLOOK

Mountain precipitation in southeastern Idaho was 92% of average during April. Unfortunately, melt caused by warm temperatures during the month more than offset any gains as snowpacks continue to decline. Snowpacks currently range from 40-60% of average. Streamflow forecasts call for 50-60% of average for most streams in the area. Montpelier Creek Reservoir is 88% of capacity, but Bear Lake reports only 42% full. Soil moisture conditions are very dry, and dryland agriculture will be severely impacted. Irrigators should be prepared for another year of water shortages, and should keep in touch with their local irrigation districts for more specific information.

BEAR RIVER BASIN
Streamflow Forecasts - May 1, 1994

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
BEAR RIVER nr Randolph	APR-JUL	5.0	50	81	62	112	157	131
SMITHS FORK nr Border, WY	MAY-JUL	31	41	48	52	55	65	92
	MAY-SEP	38	49	57	52	65	77	109
THOMAS FORK nr WY-ID Stateline	MAY-JUL	6.0	11.0	15.0	54	18.0	23	27
	MAY-SEP	7.0	12.0	16.0	53	20	25	30
BEAR RIVER blw Stewart Dam (2)	APR-SEP	76	132	170	57	210	265	298
MONTPELIER CREEK nr Montpelier	APR-JUL	2.0	4.6	6.3	52	8.0	10.6	12.2
	APR-SEP	2.6	5.5	7.4	52	9.3	12.2	14.2
CUB RIVER nr Preston	APR-JUL	17.0	22	25	53	28	33	47

BEAR RIVER BASIN
Reservoir Storage (1000 AF) - End of April

BEAR RIVER BASIN
Watershed Snowpack Analysis - May 1, 1994

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
WOODRUFF NARROWS	57.3	57.3	---	---	Smiths & Thomas Forks	3	41	48
WOODRUFF CREEK	4.0	4.0	4.0	---	Bear River ab WY-ID line	10	47	62
BEAR LAKE	1421.0	589.9	316.9	1059.0	Montpelier Creek	2	40	45
MONTPELIER CREEK	4.0	3.5	2.0	2.2	Mink Creek	1	30	36
					Cub River	1	56	85
					Bear River ab ID-UT line	17	42	55
					Malad River	1	0	0

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
 (2) - The value is natural flow - actual flow may be affected by upstream water management.

Streamflow forecasts are projections of runoff volumes that would have occurred naturally without influences from upstream reservoirs or diversions. These values are referred to as natural or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and interbasin transfers are added or subtracted from the observed (actual) streamflow volumes. The following list documents the adjustments made to each forecast point in this report.

Panhandle River Basins

- KOOTENAI R AT LEONIA, ID
 - + LAKE KOOCANUSA (STORAGE CHANGE)
- CLARK FORK AT WHITEHORSE RAPIDS, ID
 - + HUNGRY HORSE (STORAGE CHANGE)
 - + FLATHEAD LAKE (STORAGE CHANGE)
 - + NOXON RAPIDS RESV (STORAGE CHANGE)
- PEND OREILLE LAKE INFLOW, ID
 - + PEND OREILLE R AT NEWPORT, WA
 - + HUNGRY HORSE (STORAGE CHANGE)
 - + FLATHEAD LAKE (STORAGE CHANGE)
 - + NOXON RAPIDS (STORAGE CHANGE)
 - + PEND OREILLE LAKE (STORAGE CHANGE)
- PRIEST R NR PRIEST R, ID
 - + PRIEST LAKE (STORAGE CHANGE)
- COEUR D'ALENE R AT ENAVILLE, ID - No Corrections
- ST. JOE R AT CALDER, ID - No Corrections
- SPOKANE R NR POST FALLS, ID
 - + COEUR D'ALENE LAKE (STORAGE CHANGE)
 - + RATHDRUM PRAIRIE CANAL AT HEUTTER, ID

Clearwater River Basin

- DWORSHAK RESERVOIR INFLOW, ID
 - + CLEARWATER R NR PECK, ID
 - + DWORSHAK RESV (STORAGE CHANGE)
 - CLEARWATER R AT OROFINO, ID
- CLEARWATER R AT OROFINO, ID - No Corrections
- CLEARWATER R AT SPALDING, ID
 - + DWORSHAK RESV (STORAGE CHANGE)

Salmon River Basin

- SALMON R AT SALMON, ID - No Corrections
- SALMON R AT WHITE BIRD, ID - No Corrections

Weiser, Payette, Boise River Basins

- WEISER R NR WEISER, ID - No Corrections
- SF PAYETTE R AT LOWMAN, ID - No Corrections
- DEADWOOD RESERVOIR INFLOW, ID
 - + DEADWOOD R BLW DEADWOOD RESV NR LOWMAN
 - + DEADWOOD RESV (STORAGE CHANGE)
- NF PAYETTE R AT CASCADE, ID
 - + CASCADE RESV (STORAGE CHANGE)
- NF PAYETTE R NR BANKS, ID
 - + CASCADE RESV (STORAGE CHANGE)
- PAYETTE R NR HORSESHOE BEND, ID
 - + DEADWOOD RESV (STORAGE CHANGE)
 - + CASCADE RESV (STORAGE CHANGE)
- BOISE R NR TWIN SPRINGS, ID - No Corrections
- SF BOISE R AT ANDERSON RANCH DAM, ID
 - + ANDERSON RANCH RESV (STORAGE CHANGE)
- MORES CK NR ARROWROCK DAM, ID - No Corrections
- BOISE R NR BOISE, ID
 - + ANDERSON RANCH RESV (STORAGE CHANGE)
 - + ARROWROCK RESV (STORAGE CHANGE)
 - + LUCKY PEAK RESV (STORAGE CHANGE)

Wood and Lost River Basins

- BIG WOOD R AT HAILEY, ID - No Corrections
- BIG WOOD R NR BELLEVUE, ID - No Corrections
- CAMAS CK NR BLAINE, ID - No Corrections
- BIG WOOD R BLW MAGIC DAM NR RICHFIELD, ID
 - + MAGIC RESV (STORAGE CHANGE)
- LITTLE WOOD R NR CAREY, ID
 - + LITTLE WOOD RESV (STORAGE CHANGE)
- BIG LOST R AT HOWELL RANCH NR CHILLY, ID - No Corrections
- BIG LOST R BLW MACKAY RESV NR MACKAY, ID
 - + MACKAY RESV (STORAGE CHANGE)
- LITTLE LOST R BLW WET CK NR HOWE, ID - No Corrections
- LITTLE LOST R NR HOWE, ID (Disc) - No Corrections

Upper Snake River Basin

- HENRYS FORK NR ASHTON, ID
 - + HENRYS LAKE (STORAGE CHANGE)
 - + ISLAND PARK RESV (STORAGE CHANGE)
- HENRYS FORK NR REXBURG, ID
 - + HENRYS LAKE (STORAGE CHANGE)
 - + ISLAND PARK RESV (STORAGE CHANGE)
 - + DIV FM HENRYS FK BTW ASHTON & ST. ANTHONY, ID
 - + DIV FM HENRYS FK BTW ST. ANTHONY & REXBURG, ID
 - + GRASSY LAKE (STORAGE CHANGE)
- FALLS R NR SQUIRREL, ID
 - + GRASSY LAKE (STORAGE CHANGE)
- TETON R ABV SO LEIGH CK NR DRIGGS, ID - No Corrections
- TETON R NR ST. ANTHONY, ID
 - CROSS CUT CANAL
 - + SUM OF DIVERSIONS ABV GAGE
- SNAKE R NR MORAN, WY
 - + JACKSON LAKE (STORAGE CHANGE)
- PALISADES RESERVOIR INFLOW, ID
 - + SNAKE R NR IRWIN, ID
 - + PALISADES RESV (STORAGE CHANGE)
 - + JACKSON LAKE (STORAGE CHANGE)
- SNAKE R NR HEISE, ID
 - + PALISADES RESV (STORAGE CHANGE)
 - + JACKSON LAKE (STORAGE CHANGE)
- SNAKE R NR BLACKFOOT, ID
 - + PALISADES RESV (STORAGE CHANGE)
 - + JACKSON LAKE (STORAGE CHANGE)
 - + DIV FM SNAKE R BTW HEISE AND SHELLY GAGES
 - + DIV FM SNAKE R BTW SHELLY AND BLACKFT, ID
- PORTNEUF R AT TOPAZ, ID - No Corrections
- AMERICAN FALLS RESERVOIR INFLOW, ID
 - + SNAKE R AT NEELEY, ID
 - + AMERICAN FALLS (STORAGE CHANGE)
 - + PALISADES RESV (STORAGE CHANGE)
 - + JACKSON LAKE (STORAGE CHANGE)

Southside Snake River Basins

OAKLEY RESERVOIR INFLOW, ID
+ GOOSE CK ABV TRAPPER CK NR OAKLEY, ID
+ TRAPPER CK NR OAKLEY, ID

SALMON FALLS CK NR SAN JACINTO, NV - No Corrections
BRUNEAU R NR HOT SPRINGS, ID - No Corrections

OWYHEE R NR GOLD CK, NV
+ WILDHORSE RESV (STORAGE CHANGE)

OWYHEE R NR OWYHEE, NV

+ WILDHORSE RESV (STORAGE CHANGE)

OWYHEE R NR ROME, OR

+ WILDHORSE RESV (STORAGE CHANGE)

+ JORDAN VALLEY RESV (STORAGE CHANGE)

OWYHEE RESERVOIR INFLOW, OR

+ OWYHEE R BLW OWYHEE DAM, OR

+ OWYHEE RESV (STORAGE CHANGE)

+ DIV TO NORTH AND SOUTH CANALS

SUCCOR CK NR JORDAN VALLEY, OR - No Corrections

Snake R - King Hill, ID - No Corrections

SNAKE R NR MURPHY, ID - No Corrections

NAKED AT WEISER, ID - No Corrections

SNAKE R AT HELLS CANYON DAM, ID

+ BROWNLEE RESV (STORAGE CHANGE)

Bear River Basin

BEAR R NR RANDOLPH, UT

+ SULPHUR CK RESV (STORAGE CHANGE)

+ CHAPMAN CANAL DIVERSION

+ WOODRUFF NARROWS RESV (STORAGE CHANGE)

SMITHS FORK NR BORDER, WY - No Corrections

THOMAS FORK NR WY-ID STATELINE - No Corrections

BEAR B AT HARER. ID (Disc.)

+ SULPHUR CK RESV (STORAGE CHANGE)

+ CHAPMAN CANAL DIVERSION

+ WOODBUFF NARROWS RESV (STORAGE CHANGE)

BEAR B BLW STEWART DAM. ID.

+ SUI PHUB CK RESV (STORAGE CHANGE)

+ CHAPMAN CANAL DIVERSION

+ WOODBUFF NARROWS RESV (STORAGE CHANGE)

+ DINGLE INLET CANAL

+ RAINBOW INLET CANAL

MONTPELIER CK AT IRR WEIR NR MONTPELIER, ID

+ MONTPELIER CK RESV (STORAGE CHANGE)

CUB R NR PRESTON, ID - No Corrections

RESERVOIR CAPACITY DEFINITIONS - Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. The table below lists these volumes for each reservoir in this report, and defines the storage volumes that SCS uses when reporting capacity and current reservoir storage. In most cases, SCS reports usable storage, which includes active and inactive storage.

BASIN/ RESERVOIR	DEAD STORAGE	INACTIVE STORAGE	ACTIVE STORAGE	SURCHARGE STORAGE	SCS CAPACITY	SCS FIGURES INCLUDE
PANHANDLE REGION						
HUNGRY HORSE	39.73	--	3451.00	--	3451.0	ACTIVE
FLATHEAD LAKE	Unknown	--	1791.00	--	1971.0	ACTIVE
NOXON RAPIDS	Unknown	--	335.00	--	335.0	ACTIVE
PEND OREILLE	406.20	112.40	1042.70	--	1561.3	DEAD + INACTIVE + ACTIVE
COEUR D'ALENE	--	13.50	225.00	--	238.5	INACTIVE + ACTIVE
PRIEST LAKE	20.00	28.00	71.30	--	119.3	DEAD + INACTIVE + ACTIVE
CLEARWATER BASIN						
DWORSHAK	--	1452.00	2007.00	--	3459.0	INACTIVE + ACTIVE
WEISER/BOISE/PAYETTE BASINS						
MANN CREEK	1.61	0.24	11.10	--	11.1	ACTIVE
CASCADE	--	50.00	653.20	--	703.2	INACTIVE + ACTIVE
DEADWOOD	1.50	--	161.90	--	161.9	ACTIVE
ANDERSON RANCH	29.00	41.00	423.18	--	464.2	INACTIVE + ACTIVE
ARROWROCK	--	--	286.60	--	286.6	ACTIVE
LUCKY PEAK	--	28.80	264.40	13.80	293.2	INACTIVE + ACTIVE
LAKE LOWELL	--	8.00	169.10	--	177.1	INACTIVE + ACTIVE
WOOD/LOST BASINS						
MAGIC	--	--	191.50	--	191.5	ACTIVE
LITTLE WOOD	--	--	30.00	--	30.0	ACTIVE
MACKAY	0.13	--	44.37	--	44.4	ACTIVE
UPPER SNAKE BASIN						
HENRYS LAKE	--	--	90.40	--	90.4	ACTIVE
ISLAND PARK	0.40	--	127.30	7.90	135.2	ACTIVE + SURCHARGE
GRASSY LAKE	--	--	15.18	--	15.2	ACTIVE
JACKSON LAKE	--	--	847.00	--	847.0	ACTIVE
PALISADES	44.10	155.50	1200.00	--	1400.0	DEAD + INACTIVE + ACTIVE
RIRIE	4.00	6.00	80.54	10.00	80.5	ACTIVE
BLACKFOOT	--	--	348.73	--	348.7	ACTIVE
AMERICAN FALLS	--	--	1672.60	--	1672.6	ACTIVE
SOUTHSIDE SNAKE BASINS						
OAKLEY	--	--	77.40	--	77.4	ACTIVE
SALMON FALLS	48.00	--	182.65	--	182.6	ACTIVE
WILDHORSE	--	--	71.50	--	71.5	ACTIVE
OWYHEE	406.83	--	715.00	--	715.0	ACTIVE
BROWNLEE	0.45	444.00	975.30	--	1419.3	INACTIVE + ACTIVE
BEAR RIVER BASIN						
WOODRUFF NARROWS	--	1.50	57.30	--	57.3	ACTIVE
WOODRUFF CREEK	--	4.00	4.00	--	4.0	ACTIVE
BEAR LAKE	--	--	1421.00	--	1421.0	ACTIVE
	--	--		--	4.0	DEAD + ACTIVE

Interpreting Streamflow Forecasts

Introduction

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

Most Probable (50 Percent Chance of Exceeding) Forecast. This forecast is the best estimate of streamflow volume that can be produced given current conditions and based on the outcome of similar past situations. There is a 50 percent chance that the streamflow volume will exceed this forecast value. There is a 50 percent chance that the streamflow volume will be less than this forecast value.

The most probable forecast will rarely be exactly right, due to errors resulting from future weather conditions and the forecast equation itself. This does not mean that users should not use the most probable forecast; it means that they need to evaluate existing circumstances and determine the amount of risk they are willing to take by accepting this forecast value.

To Decrease the Chance of Having Too Little Water

If users want to make sure there is enough water available for their operations, they might determine that a 50 percent chance of the streamflow volume being lower than the most probable forecast is too much risk to take. To reduce the risk of not having enough water available during the forecast period, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded (or possibly some point in-between). These include:

70 Percent Chance of Exceeding Forecast. There is a 70 percent chance that the streamflow volume will exceed this forecast value. There is a 30 percent chance the streamflow volume will be less than this forecast value.

90 Percent Chance of Exceeding Forecast. There is a 90 percent chance that the streamflow volume will exceed this forecast value. There is a 10 percent chance the streamflow volume will be less than this forecast value.

To Decrease the Chance of Having Too Much Water

If users want to make sure they don't have too much water, they might determine that a 50 percent chance of the streamflow being higher than the most probable forecast is too much of a risk to take. To reduce the risk of having too much water available during the forecast period, users can base their operational decisions on one of the forecasts with a smaller chance of being exceeded. These include:

30 Percent Chance of Exceeding Forecast. There is a 30 percent chance that the streamflow volume will exceed this forecast value. There is a 70 percent chance the streamflow volume will be less than this forecast value.

10 Percent Chance of Exceeding Forecast. There is a 10 percent chance that the streamflow volume will exceed this forecast value. There is a 90 percent chance the streamflow volume will be less than this forecast value.

Using the forecasts - an example

Using the Most Probable Forecast. Using the example forecasts shown below, users can reasonably expect 36,000 acre-feet to flow past the gaging station on the Mary's River near Deeth between March 1 and July 31.

Using the Higher Exceedance Forecasts. If users anticipate a somewhat drier trend in the future (monthly and seasonal weather outlooks are available from the National Weather Service every two weeks), or if they are operating at a level where an unexpected shortage of water could cause problems, they might want to plan on receiving only 20,000 acre-feet (from the 70 percent chance of exceeding forecast). In seven out of ten years with similar conditions, streamflow volumes will exceed the 20,000 acre-foot forecast.

If users anticipate extremely dry conditions for the remainder of the season, or if they determine the risk of using the 70 percent chance of exceeding forecast is too great, then they might plan on receiving only 5000 acre-feet (from the 90 percent chance of exceeding forecast). Nine out of ten years with similar conditions, streamflow volumes will exceed the 5000 acre-foot forecast.

Using the Lower Exceedance Forecasts. If users expect wetter future conditions, or if the chance that five out of every ten years with similar conditions would produce streamflow volumes greater than 36,000 acre-feet was more than they would like to risk, they might plan on receiving 52,000 acre-feet (from the 30 percent chance of exceeding forecast) to minimize potential flooding problems. Three out of ten years with similar conditions, streamflows will exceed the 52,000 acre-foot forecast.

In years when users expect extremely wet conditions for the remainder of the season and the threat of severe flooding and downstream damage exists, they might choose to use the 76,000 acre-foot (10 percent chance of exceeding) forecast for their water management operations. Streamflow volumes will exceed this level only one year out of ten.

UPPER HUMBOLDT RIVER BASIN									
FORECAST POINT	FORECAST PERIOD	STREAMFLOW FORECASTS							
		DRIER				FUTURE CONDITIONS			
		80% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF)	10% (1000AF)	25 YR (1000AF)		
MARY'S RIVER nr Deeth	MAR-JUL APR-JUL	5.0 8.0	20.0 17.0	36 31	77 74	52 45	76 67	47 42	
LAMOILLE CREEK nr Lamolle	MAR-JUL APR-JUL	6.0 4.0	16.0 15.0	24 22	79 75	32 30	43 41	31 30	
NF HUMBOLDT RIVER at Devils Gate	MAR-JUL	6.0	12.0	43	73	74	121	59	

For more information concerning streamflow forecasting ask your local SCS field office for a copy of "A Field Office Guide for Interpreting Streamflow Forecasts".



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SOIL CONSERVATION SERVICE

In addition to basin outlook reports, a Water Supply Forecast for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.